CLAIMS

1. An isolated polypeptide comprising an amino acid sequence having at least 80% sequence identity to the sequence of one or both of SEQ ID NOS:2 and 4.

2. The polypeptide of claim 1, wherein said polypeptide is an active hSTRA6 polypeptide.

3. The polypeptide of claim 2, wherein said amino acid sequence has at least 90% sequence identity to the sequence of one or both of SEQ ID NOS:2 and 4.

4. The polypeptide of claim 2, wherein said amino acid sequence has at least 98% sequence identity to the sequence of one or both of SEQ ID NOS:2 and 4.

5. An isolated polynucleotide encoding the polypeptide of claim 1, or a complement of said polynucleotide.

6. An isolated polynucleotide comprising a nucleotide sequence having at least 80% sequence identity to the sequence of one or both of SEQ ID NOS:1 and 3, or a complement of said polynucleotide.

7. The polynucleotide of claim 6, wherein said nucleotide sequence has at least 90% sequence identity to the sequence of one or both of SEQ ID NOS:1 and 3, or a complement of said polynucleotide.

8. The polynucleotide of claim 6, wherein said nucleotide sequence has at least 98% sequence identity to the sequence of one or both of SEQ ID NOS:1 and 3, or a complement of said polynucleotide.

9. An antibody that specifically binds to the polypeptide of claim 1.

10. A method of treating tumors comprising modulating the activity of hSTRA6.

11. The method of claim 10 wherein said modulating activity of hSTRA6 comprises decreasing the activity of hSTRA6.

12. The method of claim 11, wherein said decreasing activity comprises decreasing the expression of hSTRA6.

13. The method of claim 12, wherein said decreasing expression comprises transforming a cell to express a polynucleotide anti-sense to at least a portion of an endogenous polynucleotide encoding hSTRA6.

14. The method of claim 12, wherein said decreasing activity comprises transforming a cell to express an aptamer to hSTRA6.

15. The method of claim 12, wherein said decreasing activity comprises introducing into a cell an aptamer to hSTRA6.

16. The method claim 12, wherein said decreasing activity comprises administering to a cell an antibody that selectively binds hSTRA6.

17. A method of treating cancer comprising treating a cancerous tumor by the methods of claim 11.

18. The method of claim 17 wherein said cancer is selected from the group consisting of melanoma, breast cancer, and colon cancer.

19. A method for determining whether a compound up-regulates or down-regulates the transcription of a hSTRA6 gene, comprising:

contacting said compound with a composition comprising a RNA polymerase and said gene and measuring the amount of hSTRA6 gene transcription.

20. The method of claim 19, wherein said composition is in a cell.

21. A method for determining whether a compound up-regulates or down-regulates the translation of an hSTRA6 gene, comprising:

contacting said compound with a composition with a cell, said cell comprising said gene, and measuring the amount of hSTRA6 gene translation.

22. A vector, comprising the polynucleotide of claim 5.

23. A cell, comprising the vector of claim 22.

24. A method of screening a tissue sample for tumorigenic potential, comprising:

measuring expression of hSTRA6 in said tissue sample.

25. The method of claim 24, wherein said measuring is measuring an amount of hSTRA6.

26. The method of claim 25, wherein said measuring expression is measuring an amount of mRNA encoding hSTRA6.

27. A transgenic non-human animal, having at least one disrupted STRA6 gene.

28. The transgenic non-human animal of claim 27, wherein the non-human animal is selected from the group consisting of mouse, rat, dog, cat, cow, pig, horse, rabbit, frog, chicken or sheep.

29. A transgenic non-human animal, comprising an exogenous polynucleotide having at least 80% sequence identity to one or both of SEQ ID NOS:2 and 4, or a complement of said polynucleotide.

30. The transgenic non-human animal of claim 29, wherein said exogenous polynucleotide has at least 90% sequence identity to one or both of SEQ ID NOS:2 and 4, or a complement of said polynucleotide.

31. The transgenic non-human animal of claim 29, wherein said exogenous polynucleotide has at least 98% sequence identity to one or both of SEQ ID NOS:2 and 4, or a complement of said polynucleotide.

33. A method of screening a sample for a hSTRA6 gene mutation, comprising: comparing a hSTRA6 nucleotide sequence in the sample to one or both of SEQ ID NOS:2 and 4.

34. A method of determining the clinical stage of a tumor comprising comparing expression of hSTRA6 in a sample with expression of hSTRA6 in control samples.

35. The antibody of claim 9, wherein the antibody is a monoclonal antibody.